INSTEON®

INSTEON LED Bulb
Owner's Manual

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Getting Started

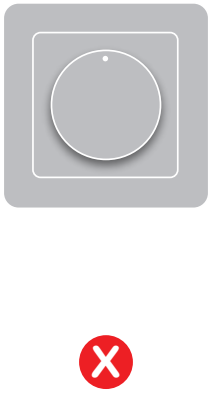
Everything you need to quickly get up and running.

INSTEON LED Bulb

Device Overview

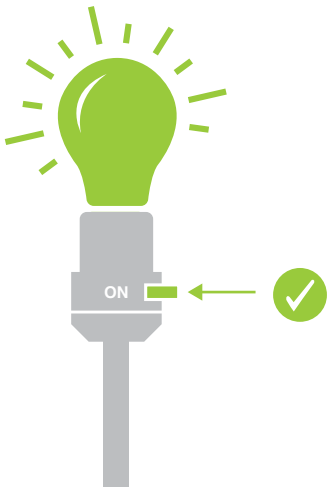
Do Not Connect to a Dimmer

INSTEON LED Bulb dims using INSTEON commands.



Leave Your Fixture On

If your switch is OFF, communication with the LED Bulb is lost.



? If your fixture is controlled by a wall switch, consider wiring as always-on.

Linking

Your LED Bulb does not have a set button. To link manually, unscrew the LED Bulb for a moment and reinsert.

INSTEON Links

INSTEON devices can stand alone and function as a local switch or dimmer, but their real power comes when they are connected together to form a control system. Most INSTEON devices can control one another and be the recipient of control. The process of associating multiple INSTEON devices to one another is called linking.

Understanding Linking

Links are One-Way

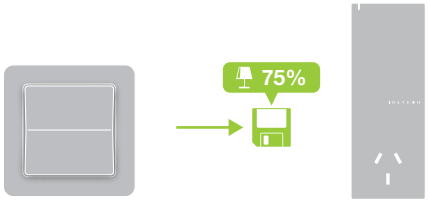
When linking INSTEON devices, the links that are created are one-way.

A B

Switch A will turn Switch B on and off but Switch B cannot turn Switch A on or off.

Links Remember a Device's State

The current state of the controlled device is stored in the link: on, off or dimmed.

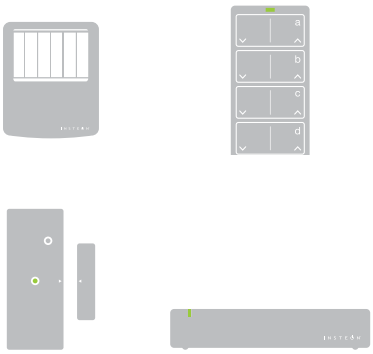


Switch Lamp Dimmer

The switch will turn on the Lamp Dimmer to 75% brightness.

Controllers

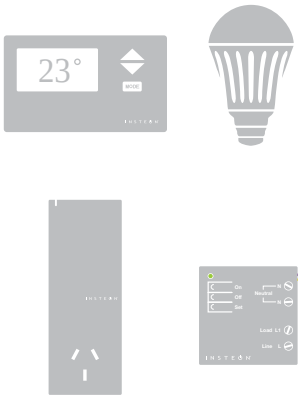
INSTEON devices that can turn other devices on or off are called controllers.



Sensors, Switches, Remotes and the Hub are common controllers.

Responders

INSTEON devices that receive the command of a controller are called responders.

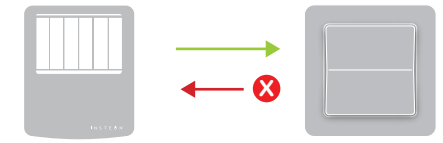


Thermostats, LED Bulbs, Plug-In Modules and In-Line Modules are common responders.

Understanding Linking

Controller-Only

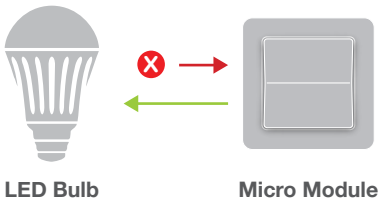
Some devices, like sensors, can only control other devices.



The Motion Sensor will turn on the Switch but the switch cannot control the Motion Sensor.

Responder-Only

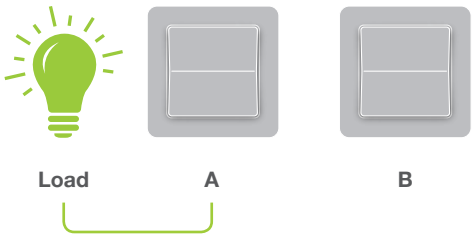
Some devices cannot control other devices; these devices only receive INSTEON commands.



Some devices can only link as responders to devices and scenes.

Grouping Devices

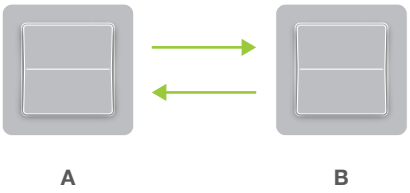
You may want to group together two devices, for example, in a virtual-three way configuration. For INSTEON, this is called cross linking.



To mirror Switch A and B so that they each control one another and the connected load, Cross Linking is necessary.

Use Cross Linking

To Cross Link, simply turn on the devices and perform the linking process twice, once in each direction.

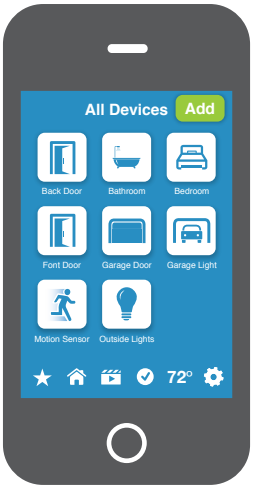


Link Switch A to Switch B and repeat to link Switch B to Switch A.

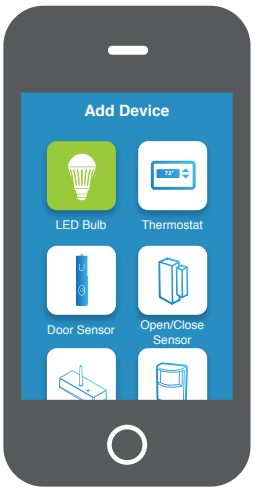
Linking to the INSTEON Hub using the iOS or Android App

1 From Rooms, navigate to All Devices.

2 Tap the Add button.



3 Select LED Bulb from the list of devices.

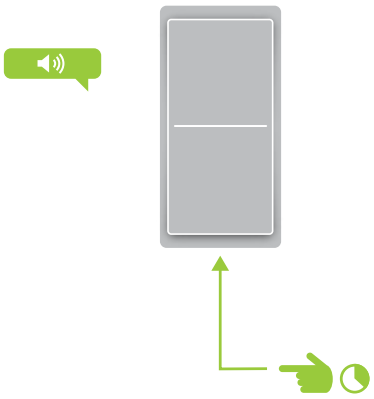


4 When prompted, turn on your fixture and screw in the LED Bulb. The Bulb will double-beep.

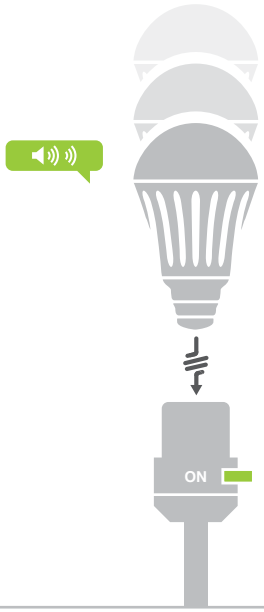
✓ You can now control your LED Bulb from the INSTEON Hub.

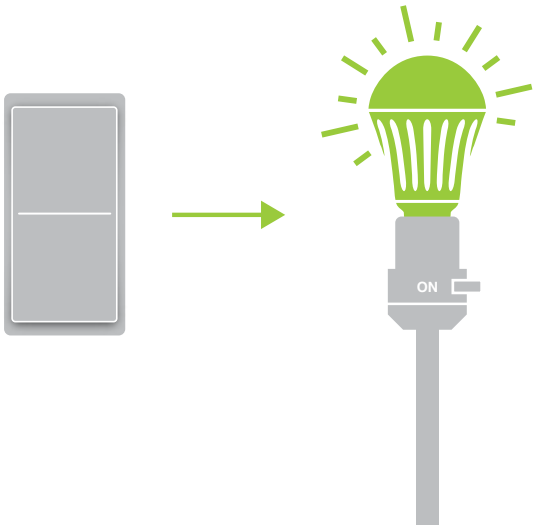
Linking with a Single-Button Controller

1. On your INSTEON controller, press and hold the set button until the device beeps.



2. Make sure your fixture is On and then screw in the LED Bulb. Your LED Bulb will double-beep.

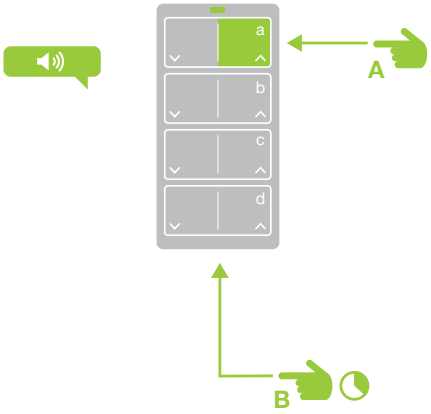




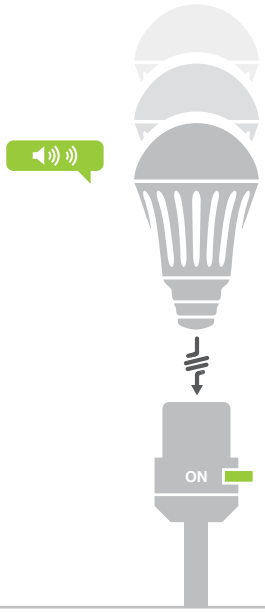
✓ Your INSTEON controller will now control your LED Bulb.

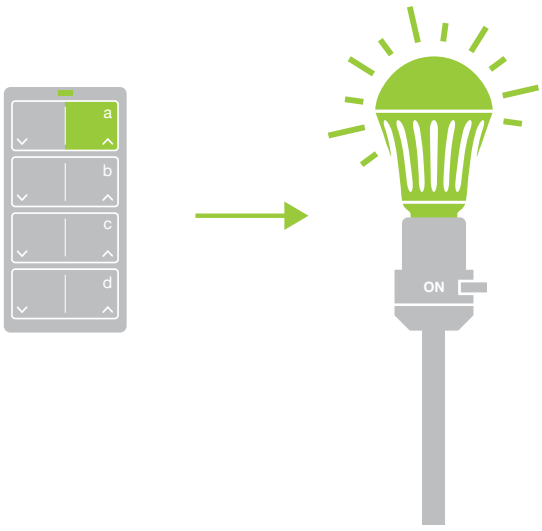
Linking with a Multi-Button Controller

1 On your INSTEON controller, tap the desired control button and then press and hold the set button until the device beeps.



2 Make sure your fixture is On and then screw in the LED Bulb. Your LED Bulb will double-beep.

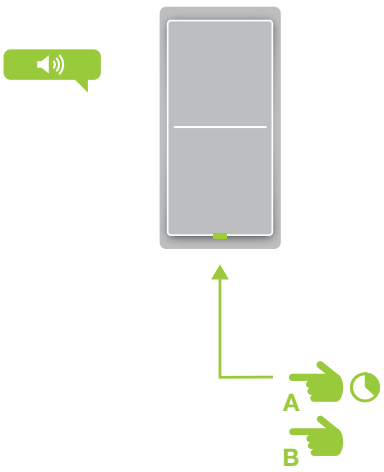




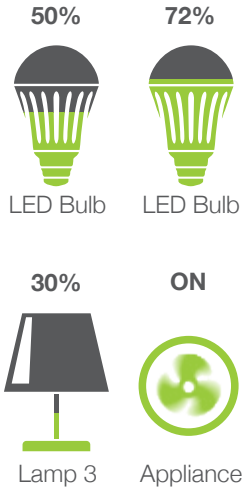
✓ Your INSTEON controller will now control your LED Bulb.

Multi-Linking or Making a Scene

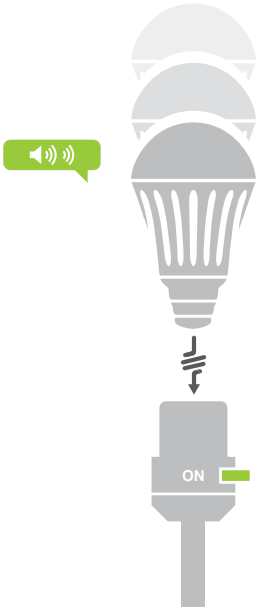
1 On your INSTEON controller, press and hold the set button until the device beeps, then tap the set button.



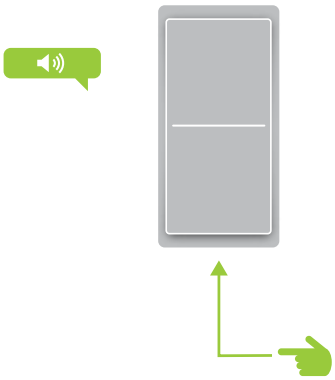
2 Adjust your scene members to their desired state: on, off, or brightness level if dimming.



3 One at a time, screw in your LED Bulbs. For other devices, press and hold the set button until they double-beep.



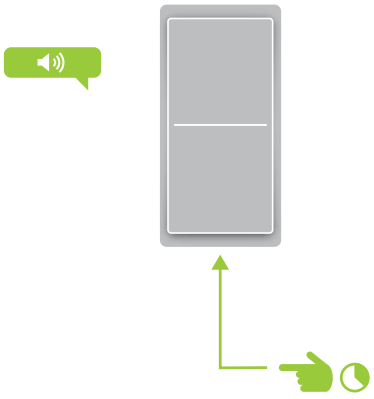
4 Tap the set button on your INSTEON controller to finish building your scene.



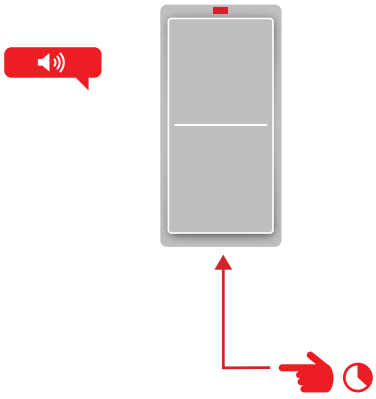
✓ Your INSTEON controller will now control your scene.

Unlinking from a Single-Button Controller

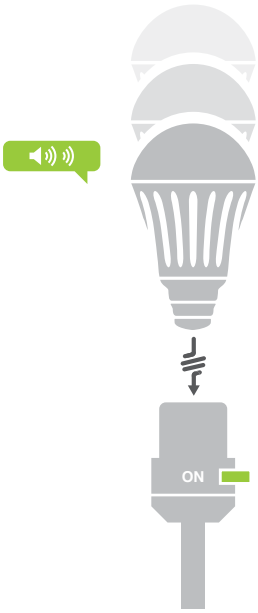
1 On your INSTEON controller, press and hold the set button until the device beeps.

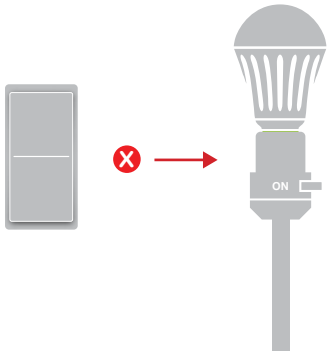


2 Press and hold the set button again until the device beeps.



3 Make sure your fixture is On and then screw in the LED Bulb. Your LED Bulb will double-beep.

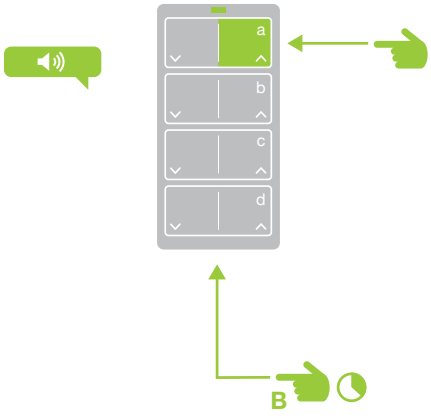




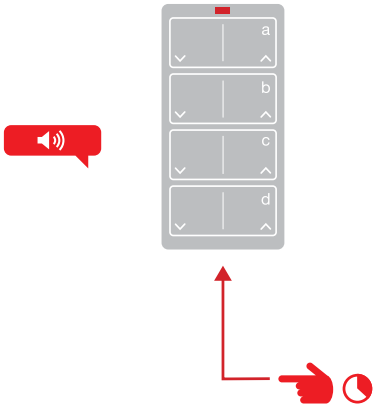
✓ Your INSTEON controller will no longer control your LED Bulb.

Unlinking from a Multi-Button Controller

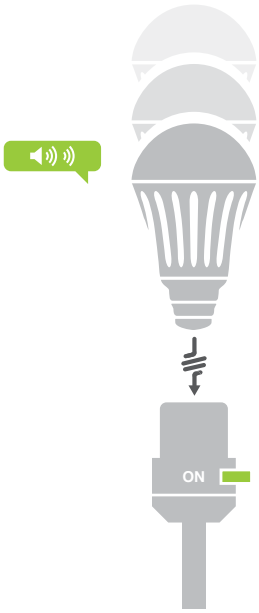
1. On your INSTEON controller, tap the desired control button and then press and hold the set button until the device beeps.

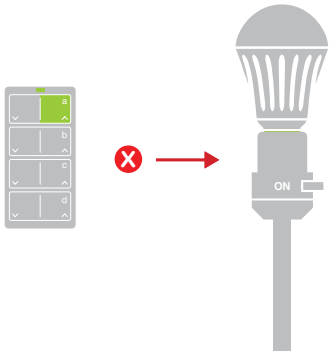


2. Press and hold the set button again until the device beeps.



3. Make sure your fixture is On and then unscrew and reinsert the LED Bulb. Your LED Bulb will double-beep.

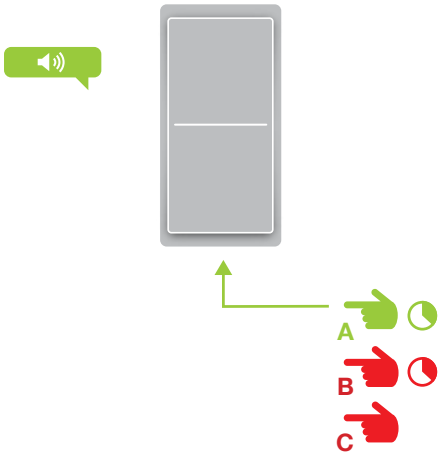




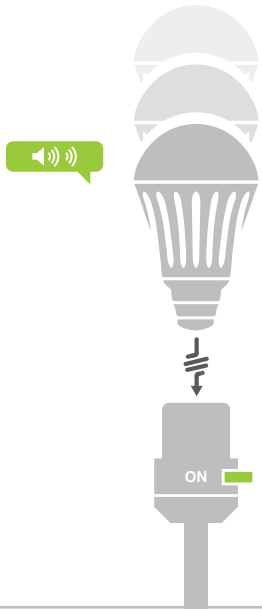
✓ Your INSTEON controller will no longer control your LED Bulb.

Multi-Unlinking or Removing a Scene

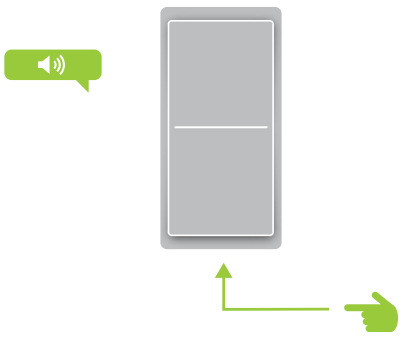
1. On your INSTEON controller, press and hold the set button until the device beeps. Press and hold the set button again, then tap the set button.

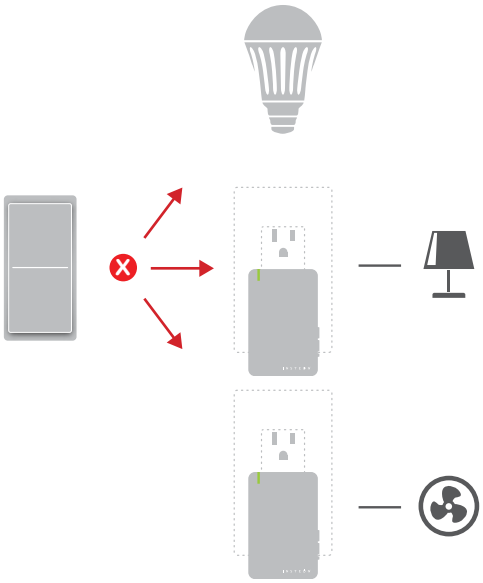


2. One at a time, unscrew and reinsert your LED Bulbs. For other devices, press and hold the set button until they double-beep.



3. Tap the set button on your INSTEON controller to exit Multi-Unlinking mode.





✓ Your INSTEON controller will no longer control your INSTEON devices.

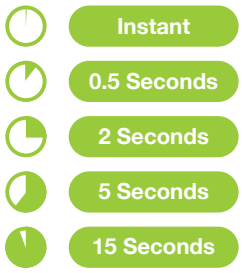
Software-Only Features

Most INSTEON devices contain features that can only be enabled, disabled or modified using INSTEON control software such as HouseLinc and an INSTEON PowerLine Modem.

Software-Only Features

Ramp Rate

Customize the speed at which the LED Bulb fades on or off. Default is 0.5 seconds, maximum duration of 8 minutes.



Disable Linking on Power-up

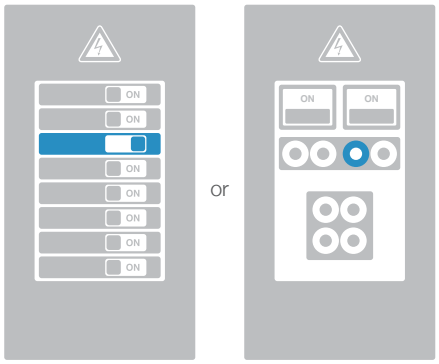
Prevents LED Bulb from entering linking mode each time power is disconnected and reapplied. Default is off.

Always-On Wiring

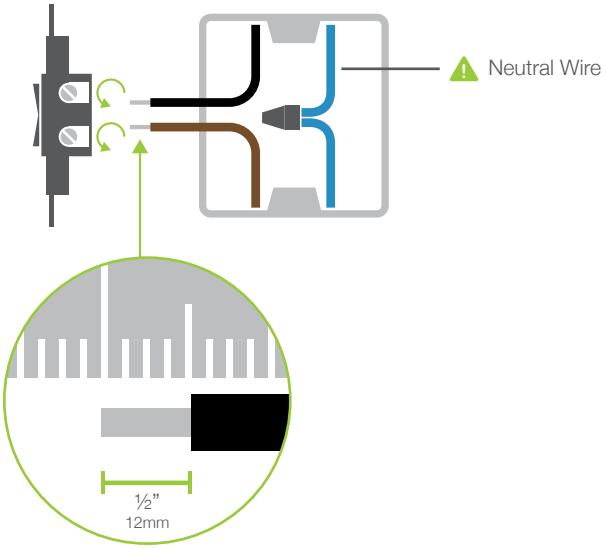
Because LED Bulb needs constant power, if you have a light fixture that is controlled by a wall switch, you might consider wiring that wall switch as “Always-On” so that flipping the switch will not disconnect LED Bulb from power. Replacing the wall switch with an INSTEON Switch will provide full control for any INSTEON device in your home.

Always-On Wiring

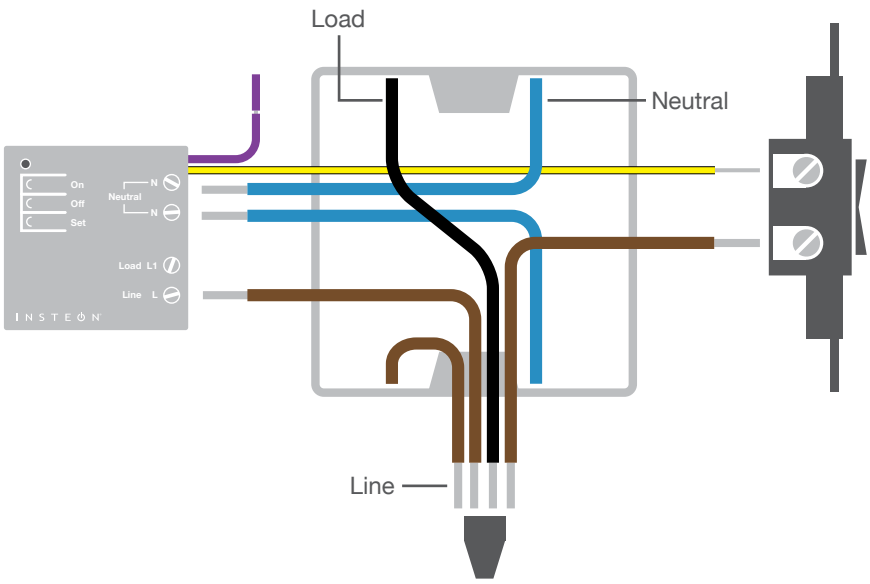
1 Turn off power to your switch at the electrical service panel.



2 Remove the old switch and disconnect the wires. If your box lacks neutral wires, stop and contact support.

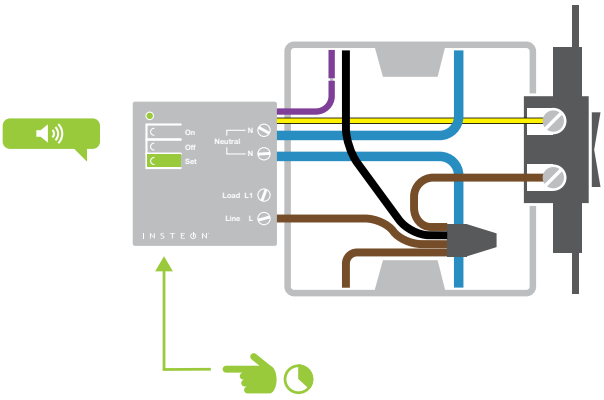


3 Connect the Micro Module wires to the identified wires in the junction box. Verify that the wire nuts are secure and that no exposed copper wire is visible except for the bare ground wire.



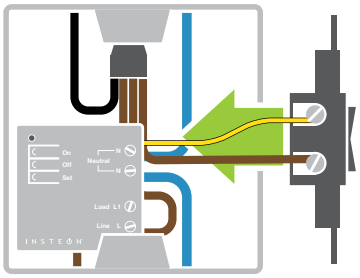
Always-On Wiring

4 Turn on power at the circuit breaker panel. To link your Micro Module to the LED Bulb, press and hold the set button until the device beeps.

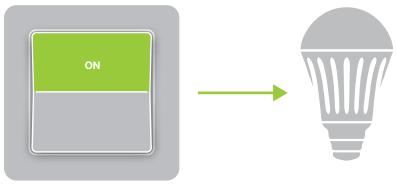


5 Unscrew and reinsert your LED Bulb for a moment and reinsert. Your LED Bulb will double-beep.

6 Turn off power and place the Micro Module in the junction box followed by the switch. Turn power on to the switch at the circuit breaker panel.



7 Test your switch. Your LED Bulb will turn on and off.



✓ Your switch will now control your LED Bulb

Appendix

Everything else you might need to know about your INSTEON product.

INSTEON Glossary

Controller	The INSTEON transmitter
Responder	The INSTEON receiver
Blinking	LED turning on and off repeatedly
Dual-Band	An INSTEON device that can send and receive both INSTEON powerline signals and INSTEON radio frequency signals
Ramp Rate	The speed at which the load fades on or off
On-Level	The preset brightness level a device will return to when turned on
INSTEON	A dual-band, mesh networking technology developed by INSTEON. The world's most reliable, expandable and simple home automation and control technology.
Link	A one way association between a controller and responder
Linking	A method for associating INSTEON controller buttons with groups of INSTEON responders such that the responders instantly return to a memorized state when the button is pushed. Links can be made manually with the set button or using software.
Unlinking	The process by which an INSTEON device can remove stored links. Just as with linking, unlinking is a one-way process and should be performed in both directions for devices that are both controllers and responders of each other, as in a 3-way switch scenario.
Multi-Linking / Unlinking	A special mode that allows more than one link to be either created or removed simultaneously, without laborious set button presses. When in linking or unlinking mode, an INSTEON device will continue to link to other devices until the set button is tapped or four minutes have elapsed, whichever occurs first.
Factory Reset	A process that erases all stored links and reconfigures the device to factory defaults.
Load	The device that you are controlling (e.g. a light bulb, ceiling fan, etc.)
On/Off	A device that can control its connected load to turn on and off but cannot dim. Usually a relay-based device.
Retry	A 2nd (or subsequent) attempt by a controller to send an INSTEON signal, usually after an acknowledge is not received from the responder in the expected time-slot.
Scene	Multiple devices respond to memorized states. For example, a dinner time scene turns on the dining table light, dims the kitchen lights to 10%, backyard lights turn off and the thermostat adjusts to 72º.
Set Button	A button on an INSTEON device that is used for setting or changing its properties
Simulcast	A method for increasing the reliability of message delivery in a network. When a node in a network sends a message, every other node that hears the message retransmits it at precisely the same time based on a global clock, provided that the message has not already been retransmitted some maximum number of times. Message propagation is more robust because each node adds its energy to the signal, much like voices in a choir. Simulcasting is much simpler than message routing because there are no routing tables to maintain and nodes can join the network without any installation procedure.
X10	A legacy powerline networking technology. Many INSTEON devices are backwards compatible with X10 devices by setting a house and unit code.

Specifications

General

Brand	INSTEON
Key Application	Low energy, remote control lighting
Product Number	2672-522 AUS/NZ Edison Screw 2672-532 AUS/NZ Bayonet
UPC	813922013658 AUS/NZ E27 813922013665 AUS/NZ B22
Patent	Protected under US and Foreign Patents (see www.insteon.com/patents)
Warranty	2 years, limited

INSTEON Features

INSTEON RF	Yes	
RF Frequency	921.0 MHz AUS/NZ	
INSTEON PowerLine	Yes	
INSTEON Controller	No	
INSTEON Responder	Yes	
Number of Responder Groups	400	
Responder Commands Supported	On	Off
	Fast On	Fast Off
	Begin Brighten	Begin Dim
	End Brighten	End Dim
	Incremental Brighten	Incremental Dim
	Beep	
Maximum INSTEON Links	400	
X10 Compatible	Yes	
Programming Lock	Yes	

Specifications

Operation

Lumens	591
Lumens per Watt	66
Color Rendering Index	83.90
Color Temperature	2700 K
Status LED	None
On Levels	32
Ramp Rate	0.125 seconds to 8 minutes (software-only)

Mechanical

Installation	E27 Medium Edison screw base B22 Bayonet base
Color	White
Dimensions	2.8” diameter, 4.7” length 72mm diameter, 119mm length
Weight	6.2 oz 176g
Operating Environment	Indoors
Operating Temperature Range	-32º to 104º F -0º to 40º C
Operating Humidity Range	0-90% relative humidity, non-condensing

Electrical

Supply Voltage	240 Volts AC ±10%, 50/60 Hz
Local Control	No
All Settings Saved Through Power Outage	Yes, all saved in non-volatile EEPROM
Power Consumption	<0.75 Watt
Certification	CE, C-Tick

Troubleshooting

LED Bulb won't link to other INSTEON Devices

Your LED Bulb may be out of range of other INSTEON Devices or a large appliance may be generating electrical noise, disrupting the INSTEON signal.

Try this:

- Check to make sure your LED Bulb is not connected to a dimmer. If so, remove the dimmer or relocate LED Bulb to a non-dimming fixture.
- Try relocating your LED Bulb to see if linking can be accomplished. If linking works normally in another area of the house, consider adding additional INSTEON devices to extend and strengthen your network.
- Some home appliances like refrigerators, televisions and speaker docks may produce excessive electrical noise. If you've recently added a new electronic device to your home, unplug it and try linking again. If LED Bulb links normally, add a powerline noise filter to the problematic appliance.

LED Bulb is slow to respond

This issue most likely lies with the controller, not your LED Bulb; the controlling device is probably repeating commands not being acknowledged by an INSTEON device that has been removed from the network. The repeated commands are slowing down the INSTEON network, resulting in a delayed response from the LED Bulb.

Try this:

- Consider if you have removed any INSTEON devices from your network that were part of the slow-to-respond scene. If so, the links to these devices need to be removed from the controller. Use software to examine the database of the controller or if you know the modules that were removed, manually remove their links using the standard unlinking procedure.
- If you are unable to identify the missing devices, perform a factory reset on the controller. This will remove all links from the controller's database but will also require that you reconfigure the device's scenes and properties.

LED Bulb turned on or off by itself

Most likely, a device somewhere in the house has been linked to your LED Bulb.

Try this:

- As LED Bulb automatically enters linking mode every time it is powered on, it is possible to accidentally link a device to LED Bulb in the brief period of time that the Bulb is in linking mode. You can use software like HouseLinc to examine LED Bulb's links to find the stray connection.

I want to factory reset my LED Bulb

Because LED Bulb lacks a set button, there is no manual way to factory reset LED Bulb.

Try this:

- Using software like HouseLinc, manually remove all of the device links.

Certifications and Warnings

This device complies with FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorise aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radiolectrique subi, mme si le brouillage est susceptible d'en compromettre le fonctionnement.

CAUTION - To reduce the risk of overheating and possible damage to other equipment do not install to control a receptacle, a motor-operated appliance, a fluorescent lighting fixture, or a transformer-supplied appliance. Gradateurs commandant une lampe a filament de tungstene – afin de reduire le risqué de surchauffe et la possibilite d'endommagement a d'autres materiels, ne pas installer pour commader une prise, un appareil a moteur, une lampe fluorescente ou un appareil alimente par un transformateur.

DECLARATION OF CONFORMITY

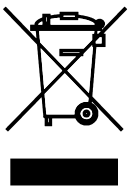
Hereby, INSTEON declares that this device is in compliance with the essential requirements and other relevant provisions of the following Directives:

1) Electromagnetic Compatibility Directive 2004/108/EC
2) Hazardous Substance Directive 2005/95/EC

Technical data and copies of the original Declaration of Conformity are available and can be obtained from INSTEON; 16542 Millikan Ave, Irvine, CA, USA.

User Information for Consumer Products Covered by EU Directive 2002/96/EC on Waste Electric and Electronic Equipment (WEEE)

This document contains important information for users with regards to the proper disposal and recycling of INSTEON products. Consumers are required to comply with this notice for all electronic products bearing the following symbol:



Environmental Information for Customers in the European Union

European Directive 2002/96/EC requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product should be disposed of separately from regular household waste streams.

It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences to the environment and human health.

For more detailed information about the disposal of your old equipment, please contact your local authorities, waste disposal service, or the shop where you purchased the product.

DECLARATION OF CONFORMITY TO R&TTE DIRECTIVE 1999/5/EC for the European Community, Switzerland, Norway, Iceland and Liechtenstein

Product category: general consumer (category 3).

Certifications and Warnings

English: This equipment is in compliance with the essential requirements and other relevant provisions of the European R&TTE Directive 1999/5/EC

Deutsch [German]: Dieses Gerät entspricht den grundlegenden Anforderungen und den weiteren entsprechenden Vorgaben der Richtlinie 1999/5/EU.

Nederlands [Dutch]: Dit apparaat voldoet aan de essentiele eisen en andere van toepassing zijnde bepalingen van de Richtlijn 1999/5/EC.

Svenska [Swedish]: Denna utrustning står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Français [French]: Cet appareil est conforme aux exigences essentielles et aux autres dispositions pertinentes de la Directive 1999/5/EC

Español [Spanish]: Este equipo cumple con los requisitos esenciales asi como con otras disposiciones de la Directiva 1999/5/CE.

Português [Portuguese]: Este equipamento está em conformidade com os requisitos essenciais e outras provisões relevantes da Directiva 1999/5/EC. Italiano [Italian]: Questo apparato é conforme ai requisiti essenziali ed agli altri principi sanciti dalla Direttiva 1999/5/CE.

Norsk [Norwegian]: Dette utstyret er i samsvar med de grunnleggende krav og andre relevante bestemmelser i EU-direktiv 1999/5/EF.

Suomi [Finnish]:Tämä laite täyttää direktiivin 1999/5/EY olennaiset vaatimukset ja on siinä asetettujen muiden laitetta koskevien määräysten mukainen. Dansk [Danish]: Dette udstyr er i overensstemmelse med de væsentlige krav og andre relevante bestemmelser i Direktiv 1999/5/EF.

Polski [Polish]: Urządzenie jest zgodne z ogólnymi wymaganiami oraz szczególnymi warunkami okreslonymi Dyrektywą UE: 1999/5/EC

Product Warranty

Limited Warranty

Seller warrants to the original consumer purchaser of this product that, for a period of two years from the date of purchase, this product will be free from defects in material and workmanship and will perform in substantial conformity to the description of the product in this Owner's Manual. This warranty shall not apply to defects or errors caused by misuse or neglect. If the product is found to be defective in material or workmanship, or if the product does not perform as warranted above during the warranty period, Seller will either repair it, replace it, or refund the purchase price, at its option, upon receipt of the product at the address below, postage prepaid, with proof of the date of purchase and an explanation of the defect or error. The repair, replacement, or refund that is provided for above shall be the full extent of Seller's liability with respect to this product. For repair or replacement during the warranty period, call 866-243-8022 with the Model # and Revision # of the device to receive an RMA# and send the product, along with all other required materials to:

INSTEON
ATTN: Receiving
16542 Millikan Ave.
Irvine, CA 92606-5027

Limitations

The above warranty is in lieu of and Seller disclaims all other warranties, whether oral or written, express or implied, including any warranty or merchantability or fitness for a particular purpose. Any implied warranty, including any warranty of merchantability or fitness for a particular purpose, which may not be disclaimed or supplanted as provided above shall be limited to the two-year of the express warranty above. No other representation or claim of any nature by any person shall be binding upon Seller or modify the terms of the above warranty and disclaimer.

Home automation devices have the risk of failure to operate, incorrect operation, or electrical or mechanical tampering. For optimal use, manually verify the device state. Any home automation device should be viewed as a convenience, but not as a sole method for controlling your home.

In no event shall Seller be liable for special, incidental, consequential, or other damages resulting from possession or use of this device, including without limitation damage to property and, to the extent permitted by law, personal injury, even if Seller knew or should have known of the possibility of such damages. Some states do not allow limitations on how long an implied warranty lasts and/or the exclusion or limitation of damages, in which case the above limitations and/or exclusions may not apply to you. You may also have other legal rights that may vary from state to state.

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